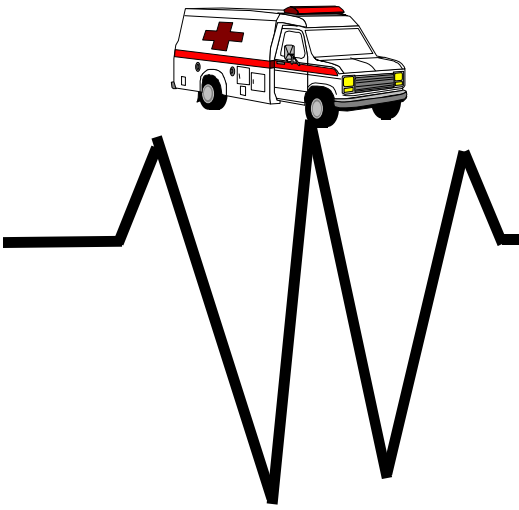

Discussion Questions

Initiating a Discussion on Planning for Transportation Disruptions Following Future Earthquakes in the San Francisco Bay Area

It is easy to be overwhelmed by the grim statistics which ABAG has developed for disruptions in future earthquake scenarios. It is also difficult to comprehend how massive the disruptions may be if hundreds of roads are closed. Therefore, in the five subregional workshops, the morning discussion used "tabletop" disaster drills to facilitate identification of the major issues, interagency dependencies, and areas of potential conflict likely to face transportation providers, governments, utilities and businesses as they struggle to address the transportation impacts after a large earthquake.

The following discussion questions will help your organization begin a discussion of some of these issues. Specifically, the objectives of the discussion should be to:

1. Evaluate the transportation impacts on organizations resulting from a major earthquake in their vicinity.
2. Develop strategies about how organizations can prepare to meet these impacts.
3. Make the connections necessary to create strategies that leverage the whole range of available local resources (including transportation providers, governments, businesses, and utilities).

The six issues on the following page are the key problems that surfaced repeatedly during the discussion sessions held by ABAG. These items should be addressed by all organizations.

Sample Discussion Questions

4. What are the immediate effects on your organization of the projected road closures?
5. What needs of your organization are affected?
   - Getting employees or students to work/school?
   - Getting customers or clients to your organization's location?
   - Getting supplies?
   - Delivering goods to market or performing routine services?
6. What additional needs does your organization face from any added responsibilities that would be undertaken after an earthquake (such as the use of school facilities as shelter sites)?
7. What assumptions is your organization making about initial response strategies?
   - Use the local commercial airport to fulfill more of your transportation needs?
   - Use the phone to reduce transit needs?
   - Roads will only be closed a couple of days?
8. Which of your organization's response strategies are dependent on actions by other agencies?
9. What if these initial strategies were also not possible? (e.g., PacBell may have difficulty re-establishing full-service for one to a few days, and some roads may be closed for months or years)
10. Could you realistically carry on business as usual or would drastic changes be necessary?
    - Would schools or school schedules need to be restructured to compensate for road closures?
    - Would you be faced with the necessity to scale down operations and lay off employees?
11. What actions could your organization take to prepare right now?
    - Formulate a specific transportation response & recovery plan?
    - Enable greater flexibility in assignment of employees to work locations?
    - Enable greater levels of telecommuting if necessary?
    - Develop relationships with more local suppliers? [Of course, local suppliers may have trouble producing goods or services as well as transporting them.]
12. Who else in your organization needs to start planning around these issues?
13. What does the "public" need to know or do? What will spur people to action?
    - Toll-gate concept being used by Caltrans at some unretrofitted bridges and at Devil's Slide?
    - Earthquake fault crossing signs?
    - Other ideas?
14. What issues should your organization pursue in the near future to ensure that broader changes occur as well?
    - Lobby local government to make street structure improvements or to have better access to road repair equipment that would mitigate the extent or time of damage from a large quake?
    - Support BART in its efforts to strengthen its system to withstand damage from future earthquakes?
    - Support other local or industry-specific initiatives?

Key Issues

1. *Potential for gridlock*

- Will we have emergency vehicles, utility repair crews, workers for "critical" businesses, other workers and sightseers all trying to use a reduced number of routes?
- How will access by utilities to areas of multiple utility problems (such as ground failure or faulting) be addressed? [Water, sewer and natural gas lines may all be broken, and repeater sites may be affected.]

2. *Interdependency of transportation and other utilities*

- Will we have power to –
  - ◊ run traffic signals,
  - ◊ pump fuel from underground tanks for emergency vehicles and cars,
  - ◊ power communications systems,
  - ◊ run water and waste water treatment plants, and
  - ◊ run the ATMs and the cash registers to pay for fuel and supplies?
- Can people overcome their tendency to drive when the phones are down to collect information?
- How can utility repair vehicles get to sites to repair facilities or pipelines in a timely manner when roads are damaged?

3. *Communication of employees with both home and work*

- Will all workers tend to think they are "essential" and try to report to work?
- How can we communicate information to workers at work who want to know their families are safe?
- What is the role of schools in communication with parents, students, staff and shelter providers?

4. *Potential disruption in transportation flow around otherwise undamaged emergency facilities*

- Are there mobile home parks, apartments with ground floor parking, or tall collapse-hazard buildings within two blocks of hospitals, fire stations, or police stations?
- Are public works departments prepared to examine local bridges near these facilities rapidly?
- Are their other potential sources of traffic disruption around these facilities?
- Where are basic supplies for hospitals coming from and how will they get to hospitals after an earthquake?

5. *Tendency of businesses to think they will be back in business in a couple of days if they have a structurally sound building without thinking:*

- How are we going to get supplies and people to our facility?
- How are we going to get our product "out"?
- How should we develop relationships with more local suppliers? [Of course, local suppliers may have trouble producing goods or services as well as transporting them.]

6. *Reliance on the media for traffic information and dissemination*

- How can emergency responders work with traffic reporters to reduce gridlock?
- How can businesses, local governments and utilities best work with the media for disseminating and verifying rapidly changing information?
- How will media employees get to work and do their work?
- How does the media plan to deal with potential power and communications problems?
- Is the media prepared to get supplies (traffic and other information, employees) in and their product (news information) out?